

Project Title: Baseline Fisheries Monitoring of the Lake Pontchartrain Basin

Federal Program: Coastal Impact Assistant Program

Nominating Entity: Louisiana Department of Wildlife and Fisheries, Marine Fisheries Division

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<u>Total CIAP Funds Requested:</u>	Four year project	Year 1	\$212,500
		Year 2	\$177,500
		Year 3	\$182,500
		Year 4	\$177,500
		Total	\$750,000

Infrastructure Funds Proposed: None

Description and Location of Project:

The project objective is to improve management of the estuarine habitats and resources of the Pontchartrain Basin by continued baseline fisheries monitoring.

CIAP Project Type: 2. Mitigation of damage to fish, wildlife and natural resources
4. Implementation of a federally approved marine coastal or comprehensive conservation management plan.

Project Justification:

Management of estuarine habitats and resources in the Lake Pontchartrain Basin is dependent on sound biological data. Natural and man-made changes in the basin environment and hydrology affect the resource, and by knowing the current status of the lake's systems, changes can be anticipated and creative management schemes can be developed to better protect the resource. Fiscal constraints have precluded extensive sampling in Lake Pontchartrain by the Department. This project will help fill gaps in our understanding of Lake Pontchartrain and the surrounding waters. The information gathered will facilitate better management tailored to the unique circumstances of the Pontchartrain Basin.

Since 2000, LDWF has collaborated with the Nekton Research Laboratory, Pontchartrain Institute for Environmental Sciences – University of New Orleans to conduct systematic fishery independent sampling in Lake Pontchartrain. The Louisiana Comprehensive Wildlife Conservation Strategy (2005) identifies

habitat conservation strategies for Louisiana marine and estuarine species. They include:

- Initiate new research and monitoring projects for all marine habitats to identify their locations, assess their current condition and extent, and develop management recommendations.
- Additional monitoring is needed to better assess impacts of navigation and access channels to public water bottoms.
- Adequate monitoring is needed of community composition throughout the coastal zone.
- Work with university researchers to monitor and verify status of cryptic species by periodically confirming presence, habitat use, life history characteristics, etc.

We are presently completing our fifth year of sampling in the lake. Our data had begun to provide information on how estuarine species in the lake respond to various stresses, both natural and anthropogenic when the area was hit by Hurricane Katrina on 29 August 2005. From a resource management perspective, the data have been used in extending the shrimp season in Lake Pontchartrain following Hurricane Katrina. Additional monitoring will assess the current condition and extent of habitats in the lake, provide a baseline for planned changes to hydrodynamics in the lake from the proposed cat 5 levee projects, continue to monitor the composition of estuarine communities in the lake, and provide the opportunity for researchers to identify and verify presence and status of cryptic species.

Project Cost Share: None.

Costs:	Year 1	Year 2	Year 3	Year 4	Total
A. Personnel:	\$5,000	\$5,000	\$5,000	\$5,000	\$20,000
B. Fringe:	\$1,500	\$1,500	\$1,500	\$1,500	\$6,000
C. Travel:	\$1,000	\$1,000	\$1,000	\$1,000	\$4,000
D. Equipment:	\$35,000	\$0	\$5,000	\$0	\$40,000
E. Supplies:	\$0	\$0	\$0	\$0	\$0
F. Contractual:	\$170,000	\$170,000	\$170,000	\$170,000	\$680,000
G. Construction:	\$0	\$0	\$0	\$0	\$0
H. Other:	\$0	\$0	\$0	\$0	\$0
I. Indirect Costs:	\$0	\$0	\$0	\$0	\$0
TOTAL	\$212,500	\$177,500	\$182,500	\$177,500	\$750,000